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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,984	10/18/2004	Scott Gaboury	81107532 (FGT 1947 PA)	5983
28549	7590	02/26/2007		
ARTZ & ARTZ, P.C. 28333 TELEGRAPH ROAD, SUITE 250 SOUTHFIELD, MI 48034			EXAMINER ROCCA, JOSEPH M	
			ART UNIT	PAPER NUMBER
			3616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/711,984

Applicant(s)

GABOURY ET AL.

Examiner

Joseph Rocca

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/18/04</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 1-20** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Based on applicants claims and specification it is unclear how the "state devices" of applicants invention could have at least one characteristic that is indicative of a state of the smart airbag, in that applicant claims these "state devices" as including trigger devices and igniters, which by their operation and/or function do not provide at least one characteristic that is indicative of a state of the smart airbag, in any manner. Accordingly, applicant's claims are rejected under 35 U.S.C. 112, second paragraph. Furthermore, applicant should note that the examiner is rejecting the claims on the merits as best understood in light of the lack of clarity and indefiniteness of applicant's claims.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. **Claims 1-8, 14-17, and 18-20** are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi et al. (U.S. App. 2002/0175507 A1). Kobayashi discloses a smart airbag system monitored by a vehicle restraint control module comprising: at least one state sensor (9) generating an airbag state signal (Pg. 5, Para. 0061); and a smart airbag fault circuit (1; Pg. 2, Para. 0029-0031) coupled to the at least one state sensor and comprising, in that it determines whether or not the airbag should be deployed based on a variety of conditions; a plurality of state devices (1, 2, (sensors) 10 and 11 (restraint apparatus that is triggered); Pg. 5, Para. 0066), said plurality of state devices configured to be monitored by the vehicle restraint control module (1); and a smart airbag state monitor (9, 110, 111), separate from the vehicle restraint control module (1), coupled to said plurality of state devices (10 and 11), and altering said state in response to said airbag state signal (See e.g., Pg. 5, Para. 0066). Regarding claim 8, applicant should further note that sensor 9, is an internal sensor.

With respect to claims 2 and 3, Kobayashi further comprises a plurality of trigger devices configured to be monitored by said vehicle restraint control module, wherein said plurality of trigger devices comprise at least one of said plurality of state devices, namely the triggering devices used to actuate 10 and 11.

Regarding claim 4, applicant should note that any triggering device having resistance is interpreted as being a "resistive state device," thus Kobayashi discloses a plurality of state devices comprise a plurality of resistive state indicators.

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With respect to claims 5-6 and 16-17, Kobayashi further discloses a switch (13) coupled to said plurality of state devices, said state monitor (9) altering state of said switch in response to said airbag state signal. Regarding claim 6, said switch (1) comprises a first position associated with a first state device and a second position associated with a second state device, namely the positions comprise which restraint apparatus to actuate (Fig. 1, Elements 10 and 11). Further regarding claim 16 the state monitor alters status of said switch in response to said airbag state signal, namely the output of the sensors.

Regarding claim 7, as discussed above Kobayashi discloses at least one of said plurality of state devices is a trigger device (See *e.g.*, Para. 0066).

With respect to claim 14, said state monitor in altering state alters a coupling between said plurality of state devices and said restraint control module, in that it alters the coupling by determining whether or not to operate the state devices (10 or 11).

Regarding claim 15, the restraint control module disclosed by Kobayashi generates a fault signal in response to said state, namely whether or not to trigger airbag based on the conditions sensed.

Regarding method claims 18-20, the structure disclosed by Kobayashi meets all of the limitations of the method claims.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9-10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (U.S. 2002/0175507 A1) in view of Cook Jr. (U.S. 5,936,313). As discussed above Kobayashi discloses a smart airbag system having all of the limitations of claim 8, at least with respect to how those claims are interpreted in light of the indefiniteness and lack of clarity with which those claims are presented. Kobayashi does not however specifically disclose that the system has a plurality of trigger devices coupled to the airbag. Cook discloses the use of a plurality of further airbag squibs, which serve as a plurality of triggering devices coupled to an airbag (Col. 3, Lines 35-40; Claim 7). Regarding claim 10, applicant should further note that airbag squibs are resistive devices. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kobayashi to include a plurality of triggering devices in view of the teachings of Cook, so as to provide a system for firing an electrical safety device wherein firing reliability is enhanced while simultaneously affording the ability to abort a firing process in the event it is determined, between the time subsequent to issuance of a firing command and prior to actual firing, that the firing command was issued in response to a fault condition.

7. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kobayashi (U.S. 2002/0175507 A1) and

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Cook Jr. (U.S. 5,936,313), as discussed above, further in view of Condrón et al. (U.S. 2003/0214308 A1). As discussed above Kobayashi in view of Cook teaches the system of claim 9. Kobayashi in view of Cook does not disclose the use of a 2 Ohm resistor, nor does it specifically disclose that said plurality of trigger devices comprise: a first trigger device with a first resistance; and a second trigger device with a second resistance that is different than said first resistance. Condrón discloses an airbag diagnostic circuit disclosing the use of airbag squibs having multiple resistances including one having 2 Ohms (Paras. 0003-0005). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the combination of Kobayashi and Cook, to utilize both: 2 Ohm resistors and triggering devices having varying resistors, in view of Condrón so as to ensure proper function and control over the system.

Furthermore regard, applicant should note that the use of a resistor having 2 Ohms appears to be no more than one of the many sizes of a resistors that one of ordinary skill in the art and appears to serve no stated problem, therefore the use of such a resistor appears to be more of a matter of design choice rather than being based on any inventive concept.

***Examiner's Note***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a. Pack Jr. (U.S. 6,315,323) discloses an apparatus for positioning an airbag which may be of interest to applicant.

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- b. Vintron et al. (U.S. 6,517,108 B1) discloses a pyrotechnic air bag stitch vent, which may be of interest to applicant.
- c. Fischer (U.S. 6,616,184 B2) discloses a vehicle occupant protection apparatus with inflation volume and shape control means.
- d. Husby (U.S. 6,789,819 B1) discloses a sensor for monitoring airbag deployment.
- e. Hasebe et al. (U.S. App. 2004/01893290 A1) discloses an airbag and airbag device having a sensor, which may be of interest to applicant.

### ***Conclusion***

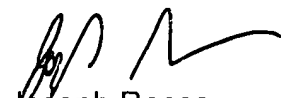
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Rocca whose telephone number is 571-272-5191. The examiner can normally be reached on 8:30 AM to 5:00 PM, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.




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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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